



AYDIN ADNAN MENDERES UNIVERSITY
GRADUATE SCHOOL OF HEALTH SCIENCES
MEDICAL BIOLOGY
MEDICAL BIOLOGY
MEDICAL BIOLOGY MASTER
COURSE INFORMATION FORM

Course Title	Rna İnterference and Model Organisms								
Course Code	TIB527	Course Level		Second Cycle (Master's Degree)					
ECTS Credit	5	Workload	125 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course									
Course Content									
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation)								
Name of Lecturer(s)	Assoc. Prof. Abdullah YALÇIN								

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading

1	1. NCBI Pubmed ve güncel bilimsel yayınlar
2	2. RNA interference technology: From Basics to Drug Development, Appasani et al. – (2005)

Week	Weekly Detailed Course Contents	
1	Theoretical	The basics and history of RNA Interference Technology I
2	Theoretical	The basics and history of RNA Interference Technology II
3	Theoretical	The basics and mechanisms of RNA ineterference applications in model organisms I
4	Theoretical	The basics and mechanisms of RNA ineterference applications in model organisms II
5	Theoretical	The silencing of genes via RNA interference
6	Theoretical	The basics of RNA technologies
7	Theoretical	The discovery and function of miRNAs
8	Intermediate Exam	Midterm Exam
9	Theoretical	The applications of RNA interference in genome research
10	Theoretical	The applications of RNA interference in drug development
11	Theoretical	The applications of RNA interference in biotechnology
12	Theoretical	The comparison of RNA interference with other gene inactivation techniques
13	Theoretical	The advantages and disadvantages of RNA interference
14	Theoretical	The application of RNA interference to clinical trials
15	Final Exam	Final Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	13	7	2	117
Midterm Examination	1	2	2	4
Final Examination	1	2	2	4
Total Workload (Hours)				125
[Total Workload (Hours) / 25*] = ECTS				5

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	
2	
3	



4	
5	

Programme Outcomes (Medical Biology Master)

1	To acquire fundamental knowledge on medical biology field
2	To gain expertise on molecular biology techniques
3	To utilize molecular biology techniques
4	To be able to construct and conduct a research project
5	To be able to follow and interpret scientific advancements

Contribution of Learning Outcomes to Programme Outcomes 1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High

	L1	L2	L3	L4	L5
P1	5	4	3	2	3
P2	1	4	5	1	1
P3	1	4	5	1	1
P4	1	1	1	1	1
P5	3	3	3	5	3

